

ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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JUN 29 1992

Federal Communications Commission
Office of the Secretary

ORIGINAL
FILE

In re Applications of)	MM DOCKET NO. 92-111
DEAS COMMUNICATIONS, INC.)	File No. BPH-910208MB
DRAGONFLY COMMUNICATIONS, INC.)	File No. BPH-910211MA
HEALDSBURG BROADCASTING, INC.)	File No. BPH-910211MB
BECKWITH COMMUNICATIONS, INC.)	File No. BPH-910211MI
DESERT ROCK LIMITED PARTNERSHIP)	File No. BPH-910211ML
HEALDSBURG EMPIRE CORPORATION)	File No. BPH-910212MM
For Construction Permit for a)	
New FM Station on Channel 240A)	
in Healdsburg, California)	

To: Administrative Law Judge
Edward J. Kuhlmann

OPPOSITION TO PETITION FOR LEAVE TO AMEND

Deas Communications, Inc. ("Deas"), by its attorneys,
hereby opposes the Petition for Leave to Amend filed June 19,
1992 by Healdsburg Broadcasting, Inc. ("HBI")

In support whereof, the following is shown.

The Hearing Designation Order, 57 Fed. Reg. 21984,
published May 26, 1992, points out that the engineering portion
of HBI's application is riddled with serious deficiencies. HDO
at paras. 8, 9, 11, 16 (issue 2). Only an ambiguity in Section
73.215(b)(2)(ii) prevented the summary dismissal of HBI's

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application prior to designation; HDO at para. 9. The HDO accorded HBI a single opportunity to fix these multiple problems. In the event it failed to do so, the HDO directs that both the amendment and the application itself are to be dismissed.

As reflected in the annexed Engineering Statement, HBI's curative Amendment falls far short of the mark, fails to comply with the HDO and should be rejected.

Annexed hereto is the Declaration and Engineering Statement of engineering consultant Elliott Kurt Klein, which serves to highlight HBI's primary continuing defects. Mr. Klein's conclusions are briefly summarized herein.¹

The HDO at para. 8 calls attention to a significant discrepancy in HBI's calculation of the height above average terrain (HAAT) of its proposed tower. While Section V-B, page 2, item 7(b)(3) of the application specifies an HAAT of 339 meters, the HAAT calculation derived from averaging the eight radials in Section V-B, page 5, question 19 of the same application is 169 meters, a variance of 100%.

Although HBI is specifically ordered in the HDO at para. 8 to correct this significant disparity in its amendment, HBI has chosen not to comply. Neither in the Amendment

¹ A draft of Mr. Klein's Engineering Statement was provided to the Mass Media Bureau on June 25, 1992.

Engineering Statement nor elsewhere is there any statement by HBI of what its proposed HAAT is. Nor is a new Section V-B, page 2 submitted, which would include a newly calculated HAAT. Specification of the correct height above average terrain is vital to an applicant's proposed coverage. It also has comparative impact in this proceeding: an areas and populations issue has been designated. On this ground alone; HBI's apparently deliberate failure to cure the existing disparity in HAAT as required by the HDO; the Amendment should be denied.

There is more. As established in Mr. Klein's Statement at 1-2, HBI contravened FAA and FCC policy by not notifying the FAA (through the filing of Form 7460-1) of its proposal to construct a new FM broadcast tower. No statement is made by HBI's engineer anywhere in the application or Amendment regarding any determination of electromagnetic interference (EMI) to any FAA facilities or frequencies. According to Mr. Klein, this omission raises further questions about the completeness and acceptability of HBI's application as amended.

Moreover, the HDO at para. 9 expresses concern about the likelihood that HBI's proposal would cause prohibited contour overlap with first adjacent Station KKHI(FM), San Francisco, California. HBI was required to rectify this egregious rule violation in its amendment. Mr. Klein states,

at 3, that while it appears that HBI's reconfigurations may have eliminated contour overlap with KKHI, they have now created overlap with first adjacent Station KYMX(FM), Sacramento, California. A detailed interference study has been appended to the Engineering Statement in order to assist the Bureau's engineers in their determinations.

Finally, Mr. Klein takes issue, at 3-4, with several aspects of the RF Radiation Study submitted with HBI's Amendment. HDO at para. 11 and designated issue 2. First, the HBI study fails to detail how its calculations were made. In Mr. Klein's professional opinion, the lack of samples or specific formulae or calculations render the Amendment defective. Second, according to Mr. Klein HBI has underestimated the allowable RFR power density under ANSI standards for co-located Station KMGG(FM), and the Amendment fails to include power density levels of HBI's proposed facilities from the base of its antenna structure. Third, the HBI statement of RFR compliance does not clearly address how the public will be protected from fields exceeding established limits for human exposure to non-ionizing RF Radiation. For these reasons, Mr. Klein finds the HBI Environmental Assessment to be deficient.

In sum, Deas' engineering consultant demonstrates that HBI's Amendment fails to cure several pre-existing

technical defects and creates new ones. Mr. Klein recommends strongly that the HBI Amendment not be accepted.

WHEREFORE, for these reasons and pursuant to paragraph 9 of the HDO, HBI's Petition for Leave to Amend should be rejected, its Amendment should be dismissed, and HBI's application should likewise be dismissed with prejudice.

Respectfully submitted,

DEAS COMMUNICATIONS, INC.

By:



Lawrence Bernstein
F. Joseph Brinig

Its Attorneys

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Washington, D.C. 20036

(202) 331-7050

Attachment

June 29, 1992

KLEIN BROADCAST ENGINEERING

dedicated to improving the science and technology of radio & television communications
JUNE 1992

DECLARATION & ENGINEERING STATEMENT of Elliott Kurt Klein Consulting Broadcast Engineer

The firm of Klein Broadcast Engineering was retained by Deas Communications, Inc., an applicant for a new FM broadcast station at Healdsburg, California, on FM channel 240A, FCC File Number BPH-910208MB, for the purpose of review of an engineering amendment recently filed with the Commission by Healdsburg Broadcasting, Inc. (HBI), an applicant for the same FM facility at Healdsburg, California, FCC File Number BPH-910211MB.

Ordered by the Commission in Docket 92-111, defined in the Hearing Designation Order, adopted by the Commission May 7, 1992 and released May 20, 1992, HBI was ordered to file and engineering amendment to cure its technically defective engineering proposal. The requested engineering amendment was filed with the Commission on June 18, 1992 and reviewed by this firm shortly thereafter.

It is this writer's opinion that the HBI amendment leaves several critical questions unanswered and thereby renders the HBI amendment defective and incomplete.

1. HBI failed to file FAA Form 7460-1

As a matter of long standing policy the FAA requires the applicant for a new or changed FM broadcast station facility to file FAA Form 7460-1, Notice of Proposed Construction or Alteration. This notice filing requirement has been policy of the FAA for the past several years for the purpose of determination of hazard to air traffic, but more importantly to determine if the engineering proposal will cause EMI to any FAA communications or FAA navigation frequencies or facilities in the area of the proposed transmitter location. This FAA policy was confirmed via telephone conversation with Mr. H.M. Whitfield, Air Traffic Specialist, Air Traffic Division, Federal Aviation Administration, Los Angeles, California. This is the FAA Western Pacific Regional Office that has responsibility for Air Traffic Hazard and EMI (electromagnetic interference) determination for the location proposed by HBI in its recent engineering amendment.

KLEIN BROADCAST ENGINEERING

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DECLARATION & ENGINEERING STATEMENT cont'd page two:

There is no statement made by HBI with regard to any determination that it has studied its own engineering proposal for EMI to any FAA frequencies or facilities. This would include not only airport facilities and landing areas, but would also include any FAA communications facility or FAA navigation aid or beacon. The failure of HBI to file the required FAA Form 7460-1 leaves a question as to whether the FCC requested amendment was complete and acceptable.

Mr. Whitfield of the FAA in Los Angeles, went on to say that Part 77 of the FAA Rules and Regulations would be amended shortly to require, in writing instead of unwritten policy, the filing of FAA Form 7460-1 for ANY new FM station proposed or ANY change in an existing FM facility no matter how small the change proposed. The fact that this FAA policy has been in place for several years is a well known fact to the Federal Communications Commission, as well as communications consulting engineers around the country that prepare filings before the Federal Communications Commission.

In a separate telephone conversation with Edward Delahunt of the FM Branch of the FCC, this writer was told that if the FAA notified the FCC there was an EMI problem with a proposal pending before the FCC, the Commission would NOT GRANT the proposal before the FAA matter was resolved to the satisfaction of the FAA. Mr. Delahunt went on to say the FCC would rescind a grant if the FCC had granted an application before the FAA made the Commission aware of an EMI or Air Hazard problem.

It is clearly a required policy of the FAA and strongly encouraged by the FCC for applicants for new or changed FM facilities to file FAA Form 7460-1. HBI has failed to do so in this proceeding.

2. HBI did not comply with all requests in the Hearing Designation Order.

Paragraph # 8 of the Hearing Designation Order in Docket 92-111, is specific in its request for clarification regarding a critical error found in the original HBI application with regard to HAAT calculations for the HBI proposed antenna system. The original HBI application proposed a specified HAAT of 169 meters HAAT. However the Commission's own processing staff has calculated the actual HAAT of the HBI engineering proposal at 339 meters HAAT. HBI FAILED to cure this discrepancy in its recently filed engineering amendment, rendering the amendment defective, incomplete and unacceptable.

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DECLARATION & ENGINEERING STATEMENT cont'd page three:

The amendment filed by HBI does not address the question raised in paragraph # 8 of the Hearing Designation Order, as requested by the Commission.

3. The HBI amendment did cure the prohibited overlap problem with first adjacent channel station KKHI, San Francisco, California, but does create overlap with first adjacent channel station KYMX, Sacramento, California.

This firm has run a detailed FM interference study on the amended facilities as proposed by HBI. This engineering interference study is included with this engineering statement and is marked Exhibit E-1. The study reveals the HBI amendment has cured the overlap problem with KKHI, however the exhibit shows overlap with station KYMX.

4. The accuracy of the HBI RFR study is in question.

HBI, by way of its recently filed engineering amendment, has filed with the Commission a study to determine if the proposed HBI facilities are in compliance with Section 1.1307 of the Commission's Rules and Regulations with regard to compliance with the ANSI/EPA (ANSI C95.1-1982) and FCC O.S.T. Bulletin Number 65, Guidelines on Human Exposure to Non-Ionizing RF radiation. The HBI study claims compliance with the above captioned guidelines, but does not describe in full detail as to how the calculations were made. No detailed method is described in the engineering narrative filed by HBI and no example of a specific formula is presented by HBI. In addition there is no sample or specific formula or calculation included within the HBI exhibit. This writer feels strongly the HBI exhibit is incomplete and defective, thereby rendering the HBI amendment defective and unacceptable.

Figure number two of the HBI engineering amendment specifies the predicted allowable RFR power density for collocated FM Station KMGG is 11.7% of the ANSI standard of 1.0 mW/cm². This firm has calculated the ANSI RFR power density contributed by KMGG to be 13.2% of the allowable ANSI standard. In addition we have calculated the power density levels of the HBI proposed engineering facilities to be 0.0408 mW/cm² at a distance of 7 meters from the base of the proposed HBI antenna structure. The HBI engineering amendment does not include this detailed information as required by the Commission and is therefore incomplete and unacceptable.

KLEIN BROADCAST ENGINEERING

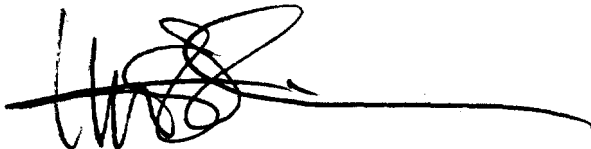
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DECLARATION & ENGINEERING STATEMENT cont'd page four:

In addition this writer feels the HBI statement of compliance does not clearly address how the General Public will be protected from fields exceeding the ANSI/EPA and FCC limits for Human Exposure to Non-Ionizing RF Radiation.

SUMMARY

The analysis of the HBI engineering amendment yields several previously stated omissions and engineering errors that render the amendment incomplete and defective. Therefore the Commission should not accept the HBI engineering amendment as filed.

Respectfully submitted,



Elliott Kurt Klein,
Consulting Broadcast Engineer

25 June 1992

Detailed FM Interference Study

Job title: HBI / DEAS

Channel 240A

FM Translators excluded.

Coordinates: 38-32-24 122-57-39

Standard facility Heights & Powers will be applied per
section 73.215 of the FCC rules.

Antenna 509.0 meters (1669.9 feet) above mean sea level.

Maximum Effective Radiated Power: .480 kW (-3.19 dBk)

User-defined directional pattern.

ENGINEERING EXHIBIT

E-1

(consists of this page
plus 14 additional pages)

Klein Broadcast Engineering
Paradise Valley, Arizona

Page 1
June 23, 1992

HAAT and ERP values for study site

Title: HBI / DEAS
ERP: .48 kW

HAMSL: 509.0 m

Latitude: 38-32-24
Longitude: 122-57-39

User-defined directional antenna pattern

Az. deg	HAAT (m)	Rel fld	ERP (kW)	Az. deg	HAAT (m)	Rel fld	ERP (kW)	Az. deg	HAAT (m)	Rel fld	ERP (kW)	Az. deg	HAAT (m)	Rel fld	ERP (kW)
0	268	1	.48	45	394	1	.48	90	437	.92	.406	135	442	.36	.062
1	278	1	.48	46	396	.998	.478	91	437	.904	.392	136	442	.354	.06
2	286	1	.48	47	399	.996	.477	92	437	.888	.379	137	441	.348	.058
3	292	1	.48	48	401	.995	.475	93	437	.872	.365	138	440	.342	.056
4	298	1	.48	49	401	.993	.473	94	437	.856	.352	139	439	.336	.054
5	303	1	.48	50	400	.991	.472	95	438	.84	.339	140	438	.33	.052
6	310	1	.48	51	399	.989	.47	96	438	.822	.324	141	436	.33	.052
7	314	1	.48	52	399	.988	.468	97	439	.804	.31	142	435	.33	.052
8	318	1	.48	53	399	.986	.466	98	439	.786	.297	143	434	.33	.052
9	322	1	.48	54	397	.984	.465	99	440	.768	.283	144	433	.33	.052
10	326	1	.48	55	394	.982	.463	100	440	.75	.27	145	432	.33	.052
11	332	1	.48	56	390	.98	.461	101	440	.736	.26	146	432	.33	.052
12	335	1	.48	57	388	.979	.46	102	440	.722	.25	147	431	.33	.052
13	338	1	.48	58	387	.977	.458	103	440	.708	.241	148	431	.33	.052
14	341	1	.48	59	385	.975	.456	104	440	.694	.231	149	431	.33	.052
15	343	1	.48	60	385	.973	.455	105	439	.68	.222	150	429	.33	.052
16	346	1	.48	61	385	.972	.453	106	438	.668	.214	151	427	.33	.052
17	348	1	.48	62	385	.97	.451	107	437	.656	.207	152	424	.33	.052
18	351	1	.48	63	386	.968	.45	108	436	.644	.199	153	421	.33	.052
19	352	1	.48	64	387	.966	.448	109	434	.632	.192	154	417	.33	.052
20	354	1	.48	65	390	.964	.446	110	432	.62	.185	155	413	.33	.052
21	356	1	.48	66	393	.963	.445	111	429	.608	.177	156	409	.33	.052
22	357	1	.48	67	395	.961	.443	112	426	.596	.171	157	406	.33	.052
23	357	1	.48	68	397	.959	.442	113	424	.584	.164	158	404	.33	.052
24	358	1	.48	69	400	.957	.44	114	422	.572	.157	159	402	.33	.052
25	358	1	.48	70	403	.956	.438	115	422	.56	.151	160	397	.33	.052
26	359	1	.48	71	407	.954	.437	116	421	.548	.144	161	390	.334	.054
27	361	1	.48	72	411	.952	.435	117	421	.536	.138	162	382	.338	.055
28	364	1	.48	73	414	.95	.433	118	421	.524	.132	163	375	.342	.056
29	367	1	.48	74	416	.948	.432	119	422	.512	.126	164	371	.346	.057
30	370	1	.48	75	418	.947	.43	120	424	.5	.12	165	366	.35	.059
31	373	1	.48	76	419	.945	.429	121	425	.49	.115	166	361	.36	.062
32	375	1	.48	77	419	.943	.427	122	428	.48	.111	167	356	.37	.066
33	377	1	.48	78	420	.941	.425	123	430	.47	.106	168	354	.38	.069
34	378	1	.48	79	420	.94	.424	124	431	.46	.102	169	353	.39	.073
35	378	1	.48	80	421	.938	.422	125	432	.45	.097	170	353	.4	.077
36	378	1	.48	81	422	.936	.421	126	433	.44	.093	171	352	.408	.08
37	378	1	.48	82	424	.934	.419	127	433	.43	.089	172	353	.416	.083
38	378	1	.48	83	426	.932	.417	128	433	.42	.085	173	353	.424	.086

39 377 1 .48 84 429 .931 .416 129 434 .41 .081 174 353 .432 .09

40	378	1	.48	85	431	.929	.414	130	436	.4	.077	175	350	.44	.093
41	381	1	.48	86	433	.927	.413	131	438	.392	.074	176	350	.452	.098
42	386	1	.48	87	435	.925	.411	132	440	.384	.071	177	349	.464	.103
43	390	1	.48	88	436	.924	.409	133	441	.376	.068	178	346	.476	.109
44	393	1	.48	89	437	.922	.408	134	442	.368	.065	179	345	.488	.114

Klein Broadcast Engineering
Paradise Valley, Arizona

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HAAT and ERP values for study site

Title: HBI / DEAS

Latitude: 38-32-24

ERP: .48 kW

HAMSL: 509.0 m

Longitude: 122-57-39

User-defined directional antenna pattern

Az.	HAAT	Rel	ERP	Az.	HAAT	Rel	ERP	Az.	HAAT	Rel	ERP	Az.	HAAT	Rel	ERP
deg	(m)	fld	(kW)	deg	(m)	fld	(kW)	deg	(m)	fld	(kW)	deg	(m)	fld	(kW)
180	345	.5	.12	225	388	1	.48	270	347	1	.48	315	84	1	.48
181	344	.513	.126	226	385	1	.48	271	352	1	.48	316	70	1	.48
182	344	.526	.133	227	384	1	.48	272	343	1	.48	317	65	1	.48
183	343	.539	.139	228	384	1	.48	273	332	1	.48	318	66	1	.48
184	338	.552	.146	229	384	1	.48	274	319	1	.48	319	74	1	.48
185	334	.565	.153	230	382	1	.48	275	308	1	.48	320	85	1	.48
186	332	.58	.161	231	379	1	.48	276	303	1	.48	321	96	1	.48
187	329	.595	.17	232	374	1	.48	277	297	1	.48	322	107	1	.48
188	323	.61	.179	233	367	1	.48	278	291	1	.48	323	120	1	.48
189	321	.625	.187	234	359	1	.48	279	286	1	.48	324	136	1	.48
190	323	.64	.197	235	349	1	.48	280	282	1	.48	325	154	1	.48
191	331	.65	.203	236	339	1	.48	281	276	1	.48	326	169	1	.48
192	337	.66	.209	237	330	1	.48	282	273	1	.48	327	177	1	.48
193	342	.67	.215	238	322	1	.48	283	275	1	.48	328	181	1	.48
194	344	.68	.222	239	315	1	.48	284	277	1	.48	329	184	1	.48
195	346	.69	.229	240	311	1	.48	285	280	1	.48	330	185	1	.48
196	347	.702	.237	241	307	1	.48	286	282	1	.48	331	184	1	.48
197	349	.714	.245	242	306	1	.48	287	284	1	.48	332	179	1	.48
198	350	.726	.253	243	309	1	.48	288	282	1	.48	333	172	1	.48
199	351	.738	.261	244	314	1	.48	289	279	1	.48	334	164	1	.48
200	350	.75	.27	245	318	1	.48	290	275	1	.48	335	157	1	.48
201	351	.766	.282	246	319	1	.48	291	272	1	.48	336	154	1	.48
202	353	.782	.294	247	319	1	.48	292	271	1	.48	337	155	1	.48
203	357	.798	.306	248	316	1	.48	293	273	1	.48	338	159	1	.48
204	360	.814	.318	249	309	1	.48	294	273	1	.48	339	165	1	.48
205	361	.83	.331	250	301	1	.48	295	270	1	.48	340	173	1	.48
206	360	.848	.345	251	291	1	.48	296	263	1	.48	341	187	1	.48
207	363	.866	.36	252	283	1	.48	297	254	1	.48	342	204	1	.48
208	367	.884	.375	253	280	1	.48	298	242	1	.48	343	223	1	.48
209	372	.902	.391	254	276	1	.48	299	231	1	.48	344	239	1	.48
210	374	.92	.406	255	271	1	.48	300	225	1	.48	345	249	1	.48
211	376	.93	.415	256	266	1	.48	301	221	1	.48	346	247	1	.48
212	381	.94	.424	257	265	1	.48	302	217	1	.48	347	236	1	.48

212	388	.95	.433	258	271	1	.48	303	212	1	.48	348	225	1	.48
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214	394	.96	.442	259	278	1	.48	304	206	1	.48	349	220	1	.48
215	400	.97	.452	260	282	1	.48	305	201	1	.48	350	219	1	.48
216	407	.973	.454	261	286	1	.48	306	198	1	.48	351	219	1	.48
217	414	.976	.457	262	291	1	.48	307	192	1	.48	352	220	1	.48
218	420	.979	.46	263	293	1	.48	308	183	1	.48	353	221	1	.48
219	426	.982	.463	264	299	1	.48	309	170	1	.48	354	220	1	.48
220	428	.985	.466	265	307	1	.48	310	156	1	.48	355	223	1	.48
221	425	.988	.469	266	314	1	.48	311	143	1	.48	356	228	1	.48
222	416	.991	.471	267	323	1	.48	312	130	1	.48	357	236	1	.48
223	405	.994	.474	268	331	1	.48	313	116	1	.48	358	245	1	.48
224	395	.997	.477	269	339	1	.48	314	100	1	.48	359	257	1	.48

Klein Broadcast Engineering
Paradise Valley, Arizona

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Detailed FM Interference Study

Title: HBI / DEAS
Channel: 240A ERP: .48 kW HAMS: 509.0 m
Database: DW 06/23/92

Latitude: 38-32-24
Longitude: 122-57-39

Call	Auth	Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St	FCC File No.		(kW)	HAMS	Longitude	-from	(km)	(km)
NEW	APP	HEALDSBURG BROADCAST	240A	.48	339	38-32-24	.0	15.89	
HEALDSBURG	CA	BPH-910211MB	DA	509	122-57-39	.0	-15.9	SHORT	

Received per FCC release #14936 dated 02/25/91,
tendered per 14964 dated 04/02/91, accepted per NA-146 dated 05/01/91;
Hearing DOC-92-111, adopted 05/07/92, released 05/20/92;
Proposed site within protected contour; Uniform ERP assumed

NEW	APP	BECKWITH COMMUNICATI	240A	1.56	195	38-37-08	349.3	8.915	25.95
HEALDSBURG	CA	BPH-910211MI			411	122-58-48	169.2	-17.0	SHORT

Received per FCC release #14940 dated 03/01/91,
tendered per 14964 dated 04/02/91, accepted per NA-146 dated 05/01/91;
PET TO DENY FILED 5/31/91; Hearing DOC-92-111, adopted 05/07/92,
released 05/20/92; Proposed site within protected contour

NEW	APP	DEAS COMMUNICATIONS,	240A	.85	264	38-37-47	.0	9.991	23.83
HEALDSBURG	CA	BPH-910208MB			457	122-57-06	180.0	-13.8	SHORT

Received per FCC release #14935 dated 02/22/91,
tendered per 14964 dated 04/02/91, accepted per NA-147 dated 05/13/91;
PET TO DENY FILED 5/31/91; Hearing DOC-92-111, adopted 05/07/92,
released 05/20/92; Proposed site within protected contour

ALLOC			240A			38-37-47	12.9	10.22	28.31
HEALDSBURG	CA	DOC-90-228				122-56-04	193.0	-18.1	SHORT

Granted effective 01/10/91, adopted 10/30/90, released 11/26/90;
Filing window 01/11-02/10/91 **CLOSED** ; SITE RESTRICTION 4 MI W;
Proposed site within protected contour; Uniform HAAT assumed

NEW	APP	DRAGONFLY COMMUNICAT	240A	6.00	100	38-38-31	.0	11.36	23.98
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HEALDSBURG CA BPH-910211MA 308 122-56-59 180.0 -12.6 SHORT
 Received per FCC release #14937 dated 02/26/91,
 tendered per 14964 dated 04/02/91, accepted per NA-146 dated 05/01/91;
 PET TO DENY FILED 5/31/91; Hearing DOC-92-111, adopted 05/07/92,
 released 05/20/92; Proposed site within protected contour

NEW APP HEALDSBURG EMPIRE CO 240A 6.00 100 38-40-52 .0 15.68 16.01
 HEALDSBURG CA BPH-910212MM 343 122-58-10 180.0 -.33 SHORT
 Received per FCC release #14940 dated 03/01/91,
 tendered per 14964 dated 04/02/91, accepted per NA-146 dated 05/01/91;
 Hearing DOC-92-111, adopted 05/07/92, released 05/20/92;
 Proposed site within protected contour

NEW APP DESERT ROCK LIMITED 240A 3.40 136 38-40-54 .0 15.75 15.89
 HEALDSBURG CA BPH-910211ML 372 122-58-15 180.0 -.14 SHORT
 Received per FCC release #14940 dated 03/01/91,
 tendered per 14964 dated 04/02/91, accepted per NA-146 dated 05/01/91;
 Hearing DOC-92-111, adopted 05/07/92, released 05/20/92;
 Proposed site within protected contour

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Detailed FM Interference Study

Title: HBI / DEAS Latitude: 38-32-24
 Channel: 240A ERP: .48 kW HAMSL: 509.0 m Longitude: 122-57-39

Call	Auth	Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St	FCC File No.		(kW)	HAMSL	Longitude	-from	(km)	(km)
NEW	APP	R.W. COMMUNICATIONS	240A	2.98	142	38-40-54	356.2	15.76	16.74
HEALDSBURG	CA	BPH-910211MJ			383	122-58-22	176.2	-.98	SHORT
Received per FCC release #14940 dated 03/01/91; PET FOR RECON FILED 4/29/91; Hearing DOC-92-111, adopted 05/07/92, released 05/20/92; Proposed site within protected contour									

KKHI-FM LIC BUCKLEY BCG CORP OF 239B 6.90 393 37-41-23 154.0 105.0
 SAN FRANCISCO CA BLH-850128LM 450 122-26-12 334.3 -6 dB U/D
 Affiliated with KKHI(AM)

--- KKHI-FM 54 dBu ---				----- Proposed Facility -----				MAX		--- Clearance ---		
Bear.	Dist.	HAAT	ERP	Bear.	Dist.	HAAT	ERP	Field	ERP	Field	ERP	Dist.
(deg)	(km)	(m)	(dBk)	(deg)	(km)	(m)	(dBk)	(dBu)	(dBk)	(dB)	(dB)	(km)
334.3	60.7	120.7	17.0	154.0	44.3	417.2	-12.8	45.7	-10.5	2.3	2.3	5.4
344.3	58.1	105.7	17.0	142.0	48.9	435.0	-12.8	44.3	-9.2	3.7	3.7	9.0
354.3	60.0	116.4	17.0	131.1	52.9	438.2	-11.3	44.4	-7.7	3.6	3.6	9.4
4.3	64.1	143.0	17.0	121.1	59.1	425.2	-9.4	43.6	-5.0	4.4	4.4	11.5
14.3	65.2	151.3	17.0	116.7	69.4	421.0	-8.5	40.8	-1.4	7.2	7.2	19.8
24.3	66.9	164.3	17.0	114.4	80.6	422.0	-8.1	37.5	2.4	10.5	10.5	29.9
34.3	67.9	173.3	17.0	114.4	92.4	422.0	-8.1	33.6	6.3	14.4	14.4	41.7
284.3	68.6	180.7	17.0	194.7	80.4	345.5	-6.4	36.8	4.7	11.2	11.2	30.7

294.3 68.4 178.0 17.0 193.8 68.5 343.6 -6.6 40.8 .6 7.2 7.2 19.4

304.3	68.2	176.7	17.0	190.5	57.2	327.3	-7.0	44.0	-3.0	4.0	4.0	10.4
314.3	67.5	169.4	17.0	182.9	47.6	343.1	-8.6	46.6	-7.2	1.4	1.4	3.5
324.3	64.8	147.9	17.0	169.2	42.7	353.0	-11.3	46.1	-9.4	1.9	1.9	4.3

Call	Auth	Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St	FCC File No.		(kW)	HAMSL	Longitude	-from	(km)	(km)
KKHI-FM	LIC	BUCKLEY BCG CORP OF	239B	6.90	393	37-41-23	154.0	105.0	
SAN FRANCISCO	CA	BLH-850128LM			450	122-26-12	334.3	-6 dB U/D	
Affiliated with KKHI(AM)									

--- KKHI-FM 54 dBu ---				----- Proposed Facility -----				MAX		--- Clearance ---		
Bear.	Dist.	HAAT	ERP	Bear.	Dist.	HAAT	ERP	Field	ERP	Field	ERP	Dist.
(deg)	(km)	(m)	(dBk)	(deg)	(km)	(m)	(dBk)	(dBu)	(dBk)	(dB)	(dB)	(km)
334.3	73.5	120.7	17.0	154.0	31.6	417.2	-12.8	50.0	-2.8	10.0	10.0	13.6
344.3	70.8	105.7	17.0	134.8	37.4	442.0	-12.0	48.2	-.2	11.8	11.8	18.1
354.3	72.7	116.4	17.0	119.8	44.4	423.7	-9.2	46.9	3.9	13.1	13.1	22.2
4.3	77.1	143.0	17.0	108.8	54.5	434.3	-7.1	44.5	8.3	15.5	15.5	29.2
14.3	78.3	151.3	17.0	105.8	67.7	438.2	-6.7	39.4	14.0	20.6	20.6	41.7
24.3	80.2	164.3	17.0	105.0	81.7	439.0	-6.5	33.9	19.6	26.1	26.1	55.4
294.3	82.0	178.0	17.0	205.3	67.5	360.7	-4.8	39.2	16.0	20.8	20.8	41.0
304.3	81.8	176.7	17.0	204.1	53.3	360.1	-5.0	45.4	9.7	14.6	14.6	27.2
314.3	80.9	169.4	17.0	197.5	40.1	349.5	-6.0	50.5	3.5	9.5	9.5	15.8
324.3	77.8	147.9	17.0	180.0	31.5	345.0	-9.2	52.0	-1.2	8.0	8.0	11.2

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Detailed FM Interference Study

Title: HBI / DEAS	Latitude: 38-32-24
Channel: 240A ERP: .48 kW HAMSL: 509.0 m	Longitude: 122-57-39

Call	Auth	Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St	FCC File No.		(kW)	HAMSL	Longitude	-from	(km)	(km)
KYMX	LIC	WGN CALIFORNIA INCOR	241B	50.0	145	38-38-09	84.6	123.1	
SACRAMENTO	CA	BLH-850313KK			152	121-33-11	265.5	-6 dB U/D	
Was KYMX-FM 02/01/90 per FCC release #127 dated 02/09/90;									
Affiliated with KCTC(AM)									

--- KYMX 54 dBu ---				----- Proposed Facility -----				MAX		--- Clearance ---		
Bear.	Dist.	HAAT	ERP	Bear.	Dist.	HAAT	ERP	Field	ERP	Field	ERP	Dist.
(deg)	(km)	(m)	(dBk)	(deg)	(km)	(m)	(dBk)	(dBu)	(dBk)	(dB)	(dB)	(km)
265.5	64.8	148.0	17.0	84.6	58.2	430.2	-3.8	49.7	-5.5	-1.7	-1.7	-4.7
275.5	64.8	148.0	17.0	73.8	60.2	415.6	-3.6	48.8	-4.4	-.8	-.8	-2.1
285.5	64.8	148.0	17.0	64.9	65.9	389.7	-3.5	46.2	-1.7	1.8	1.8	5.1
295.5	64.9	149.0	17.0	58.6	74.2	385.8	-3.4	43.3	1.3	4.7	4.7	13.3
305.5	65.1	150.0	17.0	54.8	84.2	394.7	-3.3	40.2	4.4	7.8	7.8	22.6
315.5	65.1	150.0	17.0	53.0	95.2	399.0	-3.3	36.9	7.8	11.1	11.1	33.2
325.5	64.7	147.5	17.0	52.8	106.5	399.0	-3.3	33.7	11.0	14.3	14.3	44.5

205.5	65.8	156.0	17.0	117.0	106.6	421.0	-8.6	29.1	10.3	18.9	18.9	57.2
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215.5	65.7	155.0	17.0	116.6	95.2	421.0	-8.5	32.4	7.1	15.6	15.6	45.5
225.5	65.6	154.0	17.0	114.7	84.1	422.0	-8.2	36.3	3.5	11.7	11.7	33.5
235.5	65.4	152.5	17.0	110.9	74.0	429.4	-7.5	40.6	-1.1	7.4	7.4	21.1
245.5	65.2	151.0	17.0	104.5	65.6	439.5	-6.4	44.7	-3.1	3.3	3.3	9.3
255.5	65.1	150.0	17.0	95.5	60.0	438.0	-4.8	48.3	-5.0	-1.3	-1.3	-1.7

Call	Auth	Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St	FCC File No.		(kW)	HAMSL	Longitude	-from	(km)	(km)

KYMX LIC WGN CALIFORNIA INCOR 241B 50.0 145 38-38-09 84.6 123.1
 SACRAMENTO CA BLH-850313KK 152 121-33-11 265.5 -6 dB U/D
 Was KYMX-FM 02/01/90 per FCC release #127 dated 02/09/90;
 Affiliated with KCTC(AM)

--- KYMX 54 dBu ---				----- Proposed Facility -----				MAX		--- Clearance ---		
Bear.	Dist.	HAAT	ERP	Bear.	Dist.	HAAT	ERP	Field	ERP	Field	ERP	Dist.
(deg)	(km)	(m)	(dBk)	(deg)	(km)	(m)	(dBk)	(dBu)	(dBk)	(dB)	(dB)	(km)
265.5	77.8	148.0	17.0	84.6	45.1	430.1	-3.8	52.1	4.1	7.9	7.9	14.9
275.5	77.8	148.0	17.0	68.3	48.2	397.8	-3.6	50.1	6.4	9.9	9.9	18.6
285.5	77.8	148.0	17.0	56.4	56.4	389.2	-3.4	46.3	10.4	13.7	13.7	26.8
295.5	78.0	149.0	17.0	49.4	67.7	400.6	-3.3	41.8	15.0	18.2	18.2	37.5
305.5	78.1	150.0	17.0	46.0	80.6	396.1	-3.2	36.3	20.5	23.7	23.7	50.5
315.5	78.1	150.0	17.0	45.1	94.1	394.2	-3.2	30.3	26.5	29.7	29.7	64.1
215.5	78.8	155.0	17.0	124.5	94.2	431.5	-10.0	24.6	25.4	35.4	35.4	72.8
225.5	78.7	154.0	17.0	123.6	80.5	430.6	-9.8	30.8	19.4	29.2	29.2	58.9
235.5	78.5	152.5	17.0	120.2	67.5	424.2	-9.2	36.5	14.3	23.5	23.5	45.3
245.5	78.3	151.0	17.0	113.1	56.2	423.8	-7.9	42.8	9.4	17.2	17.2	32.2
255.5	78.1	150.0	17.0	101.0	48.0	440.0	-5.9	49.0	5.2	11.0	11.0	20.7

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Detailed FM Interference Study

Title: HBI / DEAS Latitude: 38-32-24
 Channel: 240A ERP: .48 kW HAMSL: 509.0 m Longitude: 122-57-39

Call	Auth	Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St	FCC File No.		(kW)	HAMSL	Longitude	-from	(km)	(km)

KUIC CP QUICK BROADCASTING I 237B1 .59 594 38-23-48 101.7 76.72
 VACAVILLE CA BPH-910301IF 865 122-06-03 282.3 40 dB U/D
 CP Granted 02/10/92 per FCC release #21316 dated 02/14/92; ORDERED FROM 237A

--- KUIC 57 dBu ---				----- Proposed Facility -----				MAX		--- Clearance ---		
Bear.	Dist.	HAAT	ERP	Bear.	Dist.	HAAT	ERP	Field	ERP	Field	ERP	Dist.
(deg)	(km)	(m)	(dBk)	(deg)	(km)	(m)	(dBk)	(dBu)	(dBk)	(dB)	(dB)	(km)
282.3	26.7	-60.0	14.0	101.7	50.0	440.0	-6.0	50.9	40.2	46.1	46.1	48.5
292.3	26.7	-79.0	14.0	96.5	50.6	438.5	-5.0	51.6	40.4	45.4	45.4	49.0

302.3	29.1	37.6	14.0	90.3	50.3	437.0	-4.0	52.7	40.3	44.3	44.3	48.4
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312.3	26.7	-10.5	14.0	87.7	55.2	435.7	-3.9	50.9	42.2	46.1	46.1	53.3
322.3	28.4	35.4	14.0	83.3	57.9	427.0	-3.8	49.7	43.5	47.3	47.3	55.9
332.3	26.7	3.9	14.0	82.8	63.0	425.5	-3.8	47.9	45.3	49.1	49.1	61.0
342.3	26.7	-57.9	14.0	81.7	67.5	423.3	-3.8	46.3	46.9	50.7	50.7	65.5
352.3	26.7	-73.8	14.0	81.4	72.1	422.7	-3.8	44.7	48.5	52.3	52.3	70.1
2.3	26.7	-59.0	14.0	81.7	76.7	423.4	-3.8	43.2	50.0	53.8	53.8	74.8
12.3	26.7	-35.1	14.0	82.5	81.3	425.1	-3.8	41.7	51.5	55.3	55.3	79.3
22.3	48.4	123.0	14.0	72.5	97.6	412.4	-3.6	36.3	57.1	60.7	60.7	95.6
32.3	57.8	204.9	14.0	72.3	110.8	412.0	-3.6	32.7	60.7	64.3	64.3	108.8
242.3	51.5	144.9	14.0	143.5	49.7	433.5	-12.8	44.0	40.2	53.0	53.0	49.0
252.3	51.9	147.7	14.0	141.1	40.9	435.9	-12.8	47.6	36.6	49.4	49.4	40.2
262.3	35.7	57.0	14.0	117.6	44.8	421.0	-8.7	49.7	38.6	47.3	47.3	43.6
272.3	26.7	-48.4	14.0	107.0	50.6	437.0	-6.9	49.7	40.5	47.3	47.3	49.2

Call	Auth Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St FCC File No.		(kW)	HAMSL	Longitude	-from	(km)	(km)

KUIC	CP QUICK BROADCASTING I	237B1	.59	594	38-23-48	101.7	76.72	
VACAVILLE	CA BPH-910301IF			865	122-06-03	282.3	40 dB U/D	
CP Granted 02/10/92 per FCC release #21316 dated 02/14/92; ORDERED FROM 237A								

--- KUIC 100 dBu ---				----- Proposed Facility -----				MAX		--- Clearance ---		
Bear.	Dist.	HAAT	ERP	Bear.	Dist.	HAAT	ERP	Field	ERP	Field	ERP	Dist.
(deg)	(km)	(m)	(dBk)	(deg)	(km)	(m)	(dBk)	(dBu)	(dBk)	(dB)	(dB)	(km)
282.3	2.4	-60.0	14.0	101.7	74.3	440.0	-6.0	37.5	16.6	22.5	22.5	47.2
292.3	2.4	-79.0	14.0	101.4	74.4	440.0	-5.9	37.5	16.6	22.5	22.5	47.2
302.3	2.6	37.6	14.0	101.0	74.3	440.0	-5.9	37.6	16.5	22.4	22.4	47.0
312.3	2.4	-10.5	14.0	100.8	74.7	440.0	-5.8	37.5	16.7	22.5	22.5	47.3
322.3	2.6	35.4	14.0	100.5	74.8	440.0	-5.8	37.5	16.7	22.5	22.5	47.4
332.3	2.4	3.9	14.0	100.3	75.2	440.0	-5.7	37.4	16.9	22.6	22.6	47.8
342.3	2.4	-57.9	14.0	100.2	75.6	440.0	-5.7	37.2	17.0	22.8	22.8	48.1
352.3	2.4	-73.8	14.0	100.0	75.9	440.0	-5.7	37.1	17.2	22.9	22.9	48.4
2.3	2.4	-59.0	14.0	100.0	76.3	440.0	-5.7	37.0	17.4	23.0	23.0	48.8
12.3	2.4	-35.1	14.0	100.0	76.8	440.0	-5.7	36.8	17.5	23.2	23.2	49.2
22.3	4.5	123.0	14.0	98.4	77.6	439.4	-5.4	36.7	17.9	23.3	23.3	49.6
32.3	5.7	204.9	14.0	97.8	78.9	439.0	-5.2	36.3	18.4	23.7	23.7	50.7
182.3	6.3	252.3	14.0	106.3	78.0	437.7	-6.7	35.1	18.1	24.9	24.9	52.1
192.3	6.0	229.4	14.0	106.2	76.9	437.8	-6.7	35.6	17.7	24.4	24.4	51.0
202.3	5.3	171.9	14.0	105.7	76.0	438.3	-6.6	36.1	17.3	23.9	23.9	49.9

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Paradise Valley, Arizona

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Detailed FM Interference Study

Title: HBI / DEAS	Latitude: 38-32-24
Channel: 240A ERP: .48 kW HAMSL: 509.0 m	Longitude: 122-57-39

Call	Auth Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St FCC File No.		(kW)	HAMSL	Longitude	-from	(km)	(km)

KUIC	CP QUICK BROADCASTING I	237B1	.59	594	38-23-48	101.7	76.72	
VACAVILLE	CA BPH-910301IF			865	122-06-03	282.3	40 dB U/D	
CP Granted 02/10/92 per FCC release #21316 dated 02/14/92; ORDERED FROM 237A								

--- KUIC 100 dBu ---				----- Proposed Facility -----				MAX		--- Clearance ---		
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Bear. (deg)	Dist. (km)	HAAT (m)	ERP (dBk)	Bear. (deg)	Dist. (km)	HAAT (m)	ERP (dBk)	Field (dBu)	ERP (dBk)	Field (dB)	ERP (dB)	Dist. (km)
212.3	3.3	66.4	14.0	104.1	75.6	439.9	-6.4	36.5	17.1	23.5	23.5	49.1
222.3	3.8	85.6	14.0	104.3	74.9	439.7	-6.4	36.8	16.8	23.2	23.2	48.4
232.3	4.5	118.0	14.0	104.4	73.9	439.6	-6.4	37.2	16.4	22.8	22.8	47.5
242.3	4.9	144.9	14.0	104.2	73.1	439.8	-6.4	37.5	16.1	22.5	22.5	46.6
252.3	4.9	147.7	14.0	103.7	72.5	440.0	-6.3	37.9	15.8	22.1	22.1	45.9
262.3	3.1	57.0	14.0	102.6	73.8	440.0	-6.1	37.6	16.3	22.4	22.4	46.9
272.3	2.4	-48.4	14.0	102.1	74.4	440.0	-6.0	37.4	16.6	22.6	22.6	47.3

Call	Auth Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
City of License	St FCC File No.		(kW)	HAMSL	Longitude	-from	(km)	(km)

KOIT-FM LIC BONNEVILLE HOLDING C 243B 33.0 430 37-45-20 152.8 97.85
SAN FRANCISCO CA 413 122-27-05 333.1 40 dB U/D
Was KOIT 01/23/86; Affiliated with KOIT(AM)

--- KOIT-FM 54 dBu ----				----- Proposed Facility -----				MAX	--- Clearance ---			
Bear.	Dist.	HAAT	ERP	Bear.	Dist.	HAAT	ERP	Field	ERP	Field	ERP	Dist.
(deg)	(km)	(m)	(dBk)	(deg)	(km)	(m)	(dBk)	(dBu)	(dBk)	(dB)	(dB)	(km)
333.1	57.1	100.1	17.0	152.8	40.8	421.6	-12.8	47.3	33.9	46.7	46.7	39.8
343.1	62.3	130.9	17.0	136.3	38.2	441.7	-12.3	49.5	32.3	44.5	44.5	37.1
353.1	65.9	156.7	17.0	120.7	42.5	424.7	-9.3	50.1	34.6	43.9	43.9	41.0
3.1	66.6	162.3	17.0	113.2	52.3	423.7	-7.9	47.7	38.4	46.3	46.3	50.7
13.1	66.3	159.4	17.0	110.7	63.7	429.9	-7.5	44.1	42.5	49.9	49.9	61.9
23.1	66.7	163.0	17.0	109.9	75.3	432.2	-7.3	40.4	46.3	53.6	53.6	73.4
283.1	67.3	168.0	17.0	196.1	75.0	347.2	-6.2	38.9	48.8	55.1	55.1	73.0
293.1	67.1	165.9	17.0	195.6	63.4	346.6	-6.3	43.0	44.7	51.0	51.0	61.3
303.1	66.2	159.0	17.0	192.0	52.3	337.0	-6.8	46.4	40.9	47.6	47.6	50.4
313.1	67.1	166.0	17.0	186.1	41.7	331.7	-7.9	49.3	36.8	44.7	44.7	40.1
323.1	58.8	109.1	17.0	167.1	41.3	355.9	-11.8	46.3	35.9	47.7	47.7	40.2

Klein Broadcast Engineering
Paradise Valley, Arizona

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June 23, 1992

Detailed FM Interference Study

Title: HBI / DEAS
Channel: 240A ERP: .48 kW HAMSL: 509.0 m

Latitude: 38-32-24
Longitude: 122-57-39

Call	Auth Licensee name	Chan	ERP	HAAT-m	Latitude	BR-to	Dist.	Req.
------	--------------------	------	-----	--------	----------	-------	-------	------

City of License	St FCC File No.	(kW)	HAMSL	Longitude	-from	(km)	(km)
-----------------	-----------------	------	-------	-----------	-------	------	------

KOIT-FM LIC BONNEVILLE HOLDING C 243B 33.0 430 37-45-20 152.8 97.85
 SAN FRANCISCO CA 413 122-27-05 333.1 40 dB U/D
 Was KOIT 01/23/86; Affiliated with KOIT(AM)

--- KOIT-FM100 dBu ---				----- Proposed Facility -----				MAX		--- Clearance ---		
Bear.	Dist.	HAAT	ERP	Bear.	Dist.	HAAT	ERP	Field	ERP	Field	ERP	Dist.
(deg)	(km)	(m)	(dBk)	(deg)	(km)	(m)	(dBk)	(dBu)	(dBk)	(dB)	(dB)	(km)
333.1	4.9	100.1	17.0	152.8	93.0	421.6	-12.8	22.0	25.2	38.0	38.0	74.9
343.1	5.6	130.9	17.0	152.2	92.3	423.5	-12.8	22.3	24.8	37.7	37.7	74.3
353.1	6.1	156.7	17.0	151.5	92.1	425.5	-12.8	22.5	24.7	37.5	37.5	74.0
3.1	6.2	162.3	17.0	150.9	92.5	427.3	-12.8	22.4	24.8	37.6	37.6	74.4
13.1	6.2	159.4	17.0	150.4	93.2	428.3	-12.8	22.1	25.1	37.9	37.9	75.0
23.1	6.2	163.0	17.0	149.9	94.0	429.2	-12.8	21.8	25.4	38.2	38.2	75.8
33.1	6.2	160.9	17.0	149.6	94.9	429.9	-12.8	21.4	25.8	38.6	38.6	76.7
43.1	6.2	161.0	17.0	149.3	95.9	430.4	-12.8	21.0	26.2	39.0	39.0	77.7
53.1	6.3	166.0	17.0	149.1	97.0	430.7	-12.8	20.6	26.6	39.4	39.4	78.7
63.1	6.3	169.1	17.0	149.1	98.1	430.8	-12.8	20.1	27.1	39.9	39.9	79.8
243.1	6.3	169.0	17.0	156.5	98.0	407.5	-12.8	19.4	27.8	40.6	40.6	80.3
253.1	6.3	169.0	17.0	156.5	96.9	407.6	-12.8	19.9	27.3	40.1	40.1	79.2
263.1	6.3	169.0	17.0	156.3	95.9	408.0	-12.8	20.3	26.9	39.7	39.7	78.1
273.1	6.3	169.0	17.0	156.1	94.8	408.7	-12.8	20.8	26.4	39.2	39.2	77.1
283.1	6.3	168.0	17.0	155.7	93.9	410.1	-12.8	21.2	25.9	38.8	38.8	76.1
293.1	6.3	165.9	17.0	155.3	93.1	411.9	-12.8	21.6	25.5	38.4	38.4	75.3
303.1	6.2	159.0	17.0	154.7	92.6	414.2	-12.8	22.0	25.2	38.0	38.0	74.7
313.1	6.3	166.0	17.0	154.1	92.0	416.5	-12.8	22.3	24.9	37.7	37.7	74.0
323.1	5.1	109.1	17.0	153.3	92.8	419.7	-12.8	22.0	25.2	38.0	38.0	74.8

Title: HBI / DEAS

Channel: 240A ERP: .48 kW HAMSL: 509.0 m

Database: DW 06/23/92

Latitude: 38-32-24

Longitude: 122-57-39

Az. deg	Call/ARN	Max ERP (dBk)	Max field (dBu)	Prop. field (dBu)	Clear -ance (dB)	Az. deg	Call/ARN	Max ERP (dBk)	Max field (dBu)	Prop. field (dBu)	Clear -ance (dB)
0						45	KYMX	7.78	60 50%	30.3	29.7
1						46	KYMX	7.78	60 50%	36.3	23.6
2						47					
3						48					
4						49	KYMX	7.78	60 50%	41.8	18.2
5						50					
6						51					
7						52					
8						53	KYMX	7.78	48 10%	36.9	11.1
9						54					
10						55	KYMX	4.43	48 10%	40.2	7.7
11						56	KYMX	7.78	60 50%	46.3	13.7
12						57					
13						58					
14						59	KYMX	1.30	48 10%	43.3	4.7
15						60					
16						61					
17						62					
18						63					
19						64					
20						65	KYMX	-1.69	48 10%	46.2	1.8
21						66					
22						67					
23						68	KYMX	6.35	60 50%	50.1	9.9
24						69					
25						70					
26						71					
27						72	KUIC	7.78	97 10%	36.3	60.7
28						73					
29						74	KYMX	-4.39	48 10%	48.8	-.7
30						75					
31						76					
32						77					
33						78					
34						79					
35						80					
36						81	KUIC	7.78	97 10%	44.7	52.2
37						82	KUIC	7.78	97 10%	46.3	50.7
38						83	KUIC	7.78	97 10%	49.7	47.2
39						84					
40						85	KYMX	-5.51	48 10%	49.7	-1.6
41						86					
42						87					
43						88	KUIC	7.78	97 10%	50.9	46.1
44						89					

Detailed FM Interference Study

Title: HBI / DEAS

Channel: 240A ERP: .48 kW HAMSL: 509.0 m

Database: DW 06/23/92

Latitude: 38-32-24

Longitude: 122-57-39

Az. deg	Call/ARN	Max ERP (dBk)	Max field (dBu)	Prop. field (dBu)	Clear -ance (dB)	Az. deg	Call/ARN	Max ERP (dBk)	Max field (dBu)	Prop. field (dBu)	Clear -ance (dB)
90	KUIC	7.78	97 10%	52.7	44.31	135	KKHI-FM	-1.18	60 50%	48.2	11.8
91						136	KOIT-FM	7.78	94 10%	49.5	44.5
92						137					
93						138					
94						139					
95	KYMX	-5.05	48 10%	48.3	-1.26	140					
96	KUIC	7.78	97 10%	51.6	45.41	141	KUIC	7.78	97 10%	47.6	49.4
97						142	KKHI-FM	-9.15	48 10%	44.3	3.6
98	KUIC	7.78	60 50%	36.7	23.26	143	KUIC	7.78	97 10%	44.0	53.0
99						144					
100	KUIC	7.78	60 50%	37.5	22.50	145					
101	KYMX	5.18	60 50%	49.0	11.04	146					
102	KUIC	7.78	60 50%	37.5	22.52	147					
103	KUIC	7.78	60 50%	37.6	22.45	148					
104	KYMX	-3.12	48 10%	44.7	3.33	149	KOIT-FM	7.78	60 50%	21.0	39.0
105	KKHI-FM	7.78	60 50%	33.9	26.12	150	KOIT-FM	7.78	60 50%	22.1	37.8
106	KKHI-FM	7.78	60 50%	39.4	20.64	151	KOIT-FM	7.78	60 50%	22.5	37.5
107	KUIC	7.78	97 10%	49.7	47.31	152	KOIT-FM	7.78	60 50%	22.3	37.6
108						153	KOIT-FM	7.78	60 50%	22.0	37.9
109	KKHI-FM	7.78	60 50%	44.5	15.46	154	KKHI-FM	-10.50	48 10%	45.7	2.3
110	KOIT-FM	7.78	94 10%	40.4	53.63	155	KOIT-FM	7.78	60 50%	22.0	38.0
111	KYMX	-1.05	48 10%	40.6	7.44	156	KOIT-FM	7.78	60 50%	21.2	38.7
112						157					
113	KYMX	7.78	60 50%	42.8	17.24	158					
114	KKHI-FM	2.37	48 10%	37.5	10.49	159					
115	KYMX	3.52	48 10%	36.3	11.69	160					
116						161					
117	KKHI-FM	-1.36	48 10%	40.8	7.19	162					
118	KUIC	7.78	97 10%	49.7	47.31	163					
119						164					
120	KKHI-FM	3.88	60 50%	46.9	13.06	165					
121	KKHI-FM	-5.04	48 10%	43.6	4.35	166					
122						167	KOIT-FM	7.78	94 10%	46.3	47.6
123						168					
124	KYMX	7.78	60 50%	30.8	29.21	169	KKHI-FM	-9.43	48 10%	46.1	1.8
125	KYMX	7.78	60 50%	24.6	35.42	170					
126						171					
127						172					
128						173					
129						174					
130						175					
131	KKHI-FM	-7.72	48 10%	44.4	3.62	176					
132						177					
133						178					

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June 23, 1992

Detailed FM Interference Study

Title: HBI / DEAS
Channel: 240A ERP: .48 kW HAMSL: 509.0 m
Database: DW 06/23/92

Latitude: 38-32-24
Longitude: 122-57-39

Az. deg	Call/ARN	Max ERP (dBk)	Max field (dBu)	Prop. field (dBu)	Clear -ance (dB)	Az. deg	Call/ARN	Max ERP (dBk)	Max field (dBu)	Prop. field (dBu)	Clear -ance (dB)
180	KKHI-FM	-1.21	60 50%	52.0	8.00	225					
181						226					
182						227					
183	KKHI-FM	-7.17	48 10%	46.6	1.40	228					
184						229					
185						230					
186	KOIT-FM	7.78	94 10%	49.3	44.66	231					
187						232					
188						233					
189						234					
190						235					
191	KKHI-FM	-2.97	48 10%	44.0	4.03	236					
192	KOIT-FM	7.78	94 10%	46.4	47.65	237					
193						238					
194	KKHI-FM	.64	48 10%	40.8	7.21	239					
195	KKHI-FM	4.73	48 10%	36.8	11.17	240					
196	KOIT-FM	7.78	94 10%	43.0	51.01	241					
197						242					
198	KKHI-FM	3.46	60 50%	50.5	9.50	243					
199						244					
200						245					
201						246					
202						247					
203						248					
204	KKHI-FM	7.78	60 50%	45.4	14.64	249					
205	KKHI-FM	7.78	60 50%	39.2	20.77	250					
206						251					
207						252					
208						253					
209						254					
210						255					
211						256					
212						257					
213						258					
214						259					
215						260					
216						261					
217						262					

219	264
220	265
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222	267
223	268
224	269

Klein Broadcast Engineering
Paradise Valley, Arizona

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June 23, 1992

Detailed FM Interference Study

Title: HBI / DEAS

Latitude: 38-32-24

Channel: 240A ERP: .48 kW HAMSL: 509.0 m

Longitude: 122-57-39

Database: DW 06/23/92

Az.		Max	Max	Prop.	Clear	Az.		Max	Max	Prop.	Clear
deg	Call/ARN	ERP	field	field	-ance	deg	Call/ARN	ERP	field	field	-ance
		(dBk)	(dBu)	(dBu)	(dB)			(dBk)	(dBu)	(dBu)	(dB)
270						315					
271						316					
272						317					
273						318					
274						319					
275						320					
276						321					
277						322					
278						323					
279						324					
280						325					
281						326					
282						327					
283						328					
284						329					
285						330					
286						331					
287						332					
288						333					
289						334					
290						335					
291						336					
292						337					
293						338					
294						339					
295						340					
296						341					
297						342					
298						343					
299						344					
300						345					
301						346					

303	348
304	349
305	350
306	351
307	352
308	353
309	354
310	355
311	356
312	357
313	358
314	359

>> End of Channel 240A Study <<

NO CARRIER

KLEIN BROADCAST ENGINEERING

dedicated to improving the science and technology of radio & television communications

STATE of ARIZONA)
CITY of SCOTTSDALE) ss:
COUNTY of MARICOPA)

Elliott Kurt Klein, being duly sworn states, that he is a consulting broadcast engineer with offices located at 5529 East Sapphire Lane, Paradise Valley, Arizona 85253. That he has been employed in the broadcast engineering profession since 1967, and that he has prepared many different reports and applications and presented them before the Federal Communications Commission, over the past twenty-five years. That his engineering qualifications are a matter of record with the Federal Communications Commission. That he has held a valid First Class Radiotelephone Operators License since 1967. That present license number is PG-11-21248, valid for life. That he is a member in good standing of The Society of Broadcast Engineers since 1969 (SBE). That he is a member in good standing of the Institute of Electrical and Electronic Engineers (IEEE). That the calculations and or measurements and exhibits in the accompanying report or application were made by him personally or under his supervision and direction, and that all facts contained herein are true of his own personal knowledge and belief, and on such facts or statements made on belief, they are believed to be true. He assumes no liability for any errors or omissions and shall not be liable for injuries and/or damages (including consequential) which might result from use of said information. All pages, engineering exhibits, and statements are covered under the copyright laws of the United States of America and remain the property of the client and Klein Broadcast Engineering. Any unauthorized use or reproduction is prohibited by law.



Affiant: Elliott Kurt Klein for the firm:

KLEIN BROADCAST ENGINEERING

Subscribed and sworn to before me,

this 25th day of June 1992

Sara J. Briggs Nov. 23, 1994
Notary Public: Date of Commission Expiration:

